

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute** (Leibniz-HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The department **Bio Pilot Plant** invites talented and highly gifted candidates to apply as a

Doctoral Researcher (f/div/m)

Microbiology / Biotechnology

for three years initially with the chance to obtain a doctoral degree.

Research Areas:

The research of the Microfluidics Group at the Bio Pilot Plant has been focused on the establishment of a droplet-based microfluidic strategy to exploit microbial diversity and implement ultra-high-throughput screening for bacteria producing novel natural products. We have pioneered in the encapsulation and cultivation of cells and microorganisms in picoliter droplets for various biotechnological applications. Thereby, we work in interdisciplinary cooperation projects with industrial and academic partners from the Beutenberg Campus and the Friedrich-Schiller-University of Jena. We are seeking a new co-worker to support our efforts in cultivating microbes from challenging habitats.

The successful candidate will cultivate and isolate rare and hard-to-grow microorganisms as resources for new substances relevant for medical applications, e.g. antibiotics or in a growing bioeconomy. This work will be in tight collaboration with team members cultivating microbial resources with the cluster of excellence Balance of the Microverse or the German Center for Infection Research (DZIF). Work will take place in a dynamic and highly motivated group. Within the group, the Microbiologist will experience strong support based on lively collaboration and friendly interaction between the interdisciplinary scientists and access to state-of-art equipment. In addition, the applicant will have all possibilities to realize own innovative ideas and develop new projects while contributing to the organization within the Microfluidics Group and the Bio Pilot Plant.

Main Requirements:

- A Master´s degree (or equivalent) in microbiology, biotechnology or related disciplines with
- Strong interest and proven experience in microbiology and techniques for screening microbial activity
- Strong and proven experience in microbial pure culture handling
- Knowledge in optical detection methods and basic knowledge of microfluidic principles and techniques

Job Advertisement

Leibniz-HKI-20/2022



Leibniz Institute
for Natural Product Research
and Infection Biology
Hans Knöll Institute

- The candidate should embrace working in an international and interdisciplinary research team
- Ability for team-oriented as well as creative and independent work
- Very good communication skills in English

Preferred skills:

- Experience in single-cell research, microbial pure culture studies towards microbial physiology
- Familiarity with microfluidic research and/or flow cytometry would be an advantage
- Knowledge in image processing and analysis
- Knowledge in biostatistics and bioinformatics, e.g. microbial community analysis

We offer:

The successful candidate will be hosted in the department **Bio Pilot Plant** of **Prof. Dr. Miriam Agler-Rosenbaum**. The Leibniz-HKI is embedded in the outstanding scientific environment of the Beutenberg Campus providing state-of-the-art research facilities and a highly integrative network of life science groups. We offer a multifaceted scientific project with excellent technical facilities, a place in a dynamic, committed team, as well as strong scientific collaborations.

The PhD candidate will participate in the structured program of the **International Leibniz Research School** and become an associated member of the **Jena School of Microbial Communication**.

Salary is paid according to German TV-L (salary agreement for public service employees). As an equal opportunity employer, the Leibniz-HKI is committed to increasing the percentage of female scientists and therefore especially encourages them to apply. Severely disabled persons are given preferential consideration in the case of equal suitability.

Further information:

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Applications:

Complete applications in English should include a cover letter, a CV containing a complete list of publications, a brief statement of research experiences, a certificate of study/transcript of records, the addresses of two possible referees, and should be submitted via the Leibniz-HKI **online application system**. The deadline for the advertisement is **May 31, 2022**, but applications will be reviewed on a rolling basis.